

**Arizona Corporation Commission
Meeting Minutes**

DATE: October 21, 2005

TIME: 9:30 a.m.

PLACE: Arizona Corporation Commission, Hearing Room, 1200 W. Washington Street Phoenix, Arizona 85007

ATTENDANCE: No quorum of Commissioners. See attendance list on Attachment 1.

TOPIC: DISTRIBUTED GENERATION WORKSHOPS
DOCKET NO. E-00000A-99-0431

The following documents were provided at the workshop:

- Staff Draft Discussion Document dated October 19, 2005
- Revised language for the Screens section of the Discussion Document provided by Arizona Public Service (“APS”)
- Draft language for various sections of the Discussion Document provided by the Utilities
- Draft language for various sections provided by the DG Advocates
- List of issues to be addressed by the Committee dated August 26, 2005

Ms. Barbara Keene of Commission Staff welcomed the participants of the workshop, and each participant made a self-introduction. Ms. Valerie Rauluk of the Greater Tucson Coalition for Solar Energy provided a brief presentation on behalf of the Committee. It was discussed that the Committee has been meeting almost weekly and has made progress regarding the Screens, Levels and Certification. Ms. Rauluk indicated that draft language would be prepared by the Committee and presented at the next workshop. In addition it was discussed that at a recent committee meeting, Mr. Tom Basso of the National Renewable Energy Laboratory provided a presentation regarding the Institute of Electrical and Electronic Engineers (“IEEE”) 1547 interconnection standards, and Mr. Dave Menicucci of the Energy Surety Program office of Sandia National Laboratories provided a presentation on the surety of microgrids. Staff indicated that these presentations would be posted on the Commission’s website.

Mr. Tom Yost of APS presented a draft of the Screens section of the Discussion Document. The document contained language to address utility concerns about fused laterals and line sections. In addition, section J was eliminated. These issues will be addressed by the Committee and presented at the next workshop. Mr. Yost also indicated that APS will be proposing language related to allowing DG on a network based on work done by IEEE 1547.6 and Pacific Gas & Electric. Mr. Chris Weathers of APS also clarified that the draft Screens language would not prevent any DG project from

connecting and that if the project did not meet the qualifications under the screens section it would be processed under the third bucket or normal track.

The group discussed the draft language for various sections of the Discussion Document provided by the Utilities and the DG Advocates. The group discussed the issue of insurance (Section 2.4) at length. APS explained that insurance requirements are necessary because the DG equipment could cause backfeed and represent a safety risk to employees and the general public. In addition, any injured party would seek financial restitution from the utility, shifting the risk to ratepayers. Mr. Weathers commented that there is a recent (August 2005) EPRI research report addressing the issue of DG units feeding a fault and that the Los Angeles Department of Water and Power is having concerns related to this occurrence. Mr. Chris Cook of Sun Edison commented that the body of evidence suggests that there is little danger as a result of DG interconnection. Mr. Cook noted that the New Jersey Board of Public Utilities rejected an insurance requirement finding that the liability resulting from DG interconnection is not significantly greater than other conditions such as damage caused by fallen trees. In addition, it was discussed that the cost associated with requiring additional insurance would create a hurdle for DG.

It was also discussed that the draft Utility language regarding insurance would not require a residential customer with a DG system (most likely solar) to obtain insurance. However, the same type of DG facility for a general service customer would require insurance. It was determined that in order to fully assess the issue of insurance, the group would need additional information regarding the actual cost of obtaining an insurance policy. Ms. Rauluk indicated the DG industry is new and the insurance product that would be quoted would be based on information that was not relevant to correctly assessing any potential risk. APS indicated that it has required insurance for DG projects that are currently in place. The group discussed the possibility of asking a representative from the insurance industry to give a presentation on the subject to the group. **Staff requested that participants provide information at subsequent workshops about what parties may pay for these types of policies and how risk is generally determined by the insurance company.**

The group discussed the DG Advocates proposed language regarding the benefits and costs of DG found under Section 2.2 Utility Rights and Responsibilities of the Discussion Document. The group discussed what could be considered the potential benefits of DG. APS suggested that the word “studies” should be changed to “facility upgrades.” **The utilities volunteered to modify the DG Advocates language and bring it for review at the next workshop.**

Based on the Utilities draft language, the issue of Separate System Section 1.4.1 was discussed. **It was determined that Staff would add the language proposed by the Utilities to the Discussion Document.**

The Utilities objected to the language that is currently in the Discussion Document regarding Non-Circumvention Section 2.5. APS commented that the language is too

restrictive. The DG Advocates commented that their main concern is that utilities would not use the information they know about a project to make a counter bid on the project. **The DG Advocates agreed to come back with proposed language at the next workshop.**

In response to modifications to Section 2.6 Force Majeure proposed by the Utilities, it was discussed that the proposed language would be acceptable with minor wording changes to reflect “any obligation already incurred.” **It was determined that Staff would add this language to the Discussion Document.**

The group discussed the language regarding Indemnity Section 2.7 proposed by the Utilities and the DG Advocates. APS indicated that the Utilities language was taken from the FERC Small Generator Interconnection documents with the addition of language in 2.7.6 of the Utilities proposal which relates to the Arizona Revised Statutes 40-360.41-45 (“Statute”). Mr. Michael Curtis representing Mohave and Navopache Electric Cooperatives also suggested adding language indicating that “the customer shall provide evidence of financial responsibility to comply in the event of an instance.” **The group indicated that they would need to review the language related to the Statute and provide feedback at the next meeting.**

The Utilities provided language regarding Limitation of Liability which would become a new section in the Discussion Document. **Ms. Pauline Foley of APS and Mr. Cook are working on revising the language and will bring it back to the group at a subsequent meeting.**

In regards to section 2.8 Other Issues (No Additional Requirements) of the Discussion Document, the Utilities provided modified language. The Utilities deleted language that prevents the utility from requiring a utility accessible disconnect switch if the DG facility meets the requirements of the rule. The DG Advocates indicated that the Distributed Energy Association of Arizona needs to firm up its position on this issue. The issue of whether a disconnect switch should be required or not should be a hot topic and the committee will work on the issue. In response to additional language proposed by the Utilities, the issue of who pays for the cost of additional equipment was discussed along with changing regulations regarding equipment requirements and retrofit applications. **Mr. Cook will draft language to help expand on the language proposed by the Utilities.**

Based on the changes to Section 3 Definitions proposed by the Utilities, the definition for “Network Service” and “Spot Network” would be deleted and the words “simultaneously” and “uninterrupted” would be added to the definition for “Primary Network” and “Secondary Spot Network.” In addition, the group discussed that the definitions for “Annualized Period,” “Independent Generation,” and “Net Metering” would be removed from this section. **It was determined that Staff would make these changes to the Discussion Document.**

The issue of developing a manual in conjunction with a rule or just a rule was discussed. The group generally agreed that a manual should be developed in conjunction with the rule.

In regards to Section 3.7 Utility Reporting Requirements, it was discussed that the manual could be submitted to the Commission within 90 days for Commission approval instead of the 60 days which is currently in the Discussion Document. **It was determined that Staff would make this change to the Discussion Document.**

It was also discussed that APS currently files an annual interconnection report with the Commission that includes DG projects. TEP representatives indicated that they would check to see if their current report complies with the proposed language in the Discussion Document.

Sections 3.8 Pre Interconnection Studies, 3.10 Interconnection Dispute Resolution, and 3.11 Other Issues are currently being discussed by the Committee.

In regards to Section 3.9 Disconnect from or Reconnect with the Grid Procedure, adding the words “similar to other customers” after “modifications” and the issue of “seven business days” were discussed. The issue of not treating customers differently was also discussed. **An APS representative indicated that the language under this section would be reviewed and any modifications would be brought back to the group.**

It was also discussed that the group would work towards developing a standardized interconnection agreement form similar to what FERC utilizes.

The group also discussed that a technical manual should be developed specifically for utilities. It was discussed that the Draft 1999 Interconnection Requirements Document includes certain technical information that could be utilized and would serve as a starting point. Information from IEEE 1547 could also be incorporated as well as information for small systems. The group also discussed that a separate technical committee could be established but developing the manual would take some time.

The group also discussed the Issues List that was provided as part of the August 26, 2005, meeting minutes and updated the status of the topics. Issue numbers 17 and 19 were found to be completed. In addition, the term “Independent Generation” should be removed from issue number 16 and the term “Distribution” and “Transmission” should be removed from issue number 18. It was also discussed that issue number 20 regarding electrical diagrams would be addressed in a technical manual and not the standard. New Topics including Section 3.9 in regards to requiring a visible disconnect and Section 3.10 Dispute Resolution were identified. Please see Attachment 2 for a revised Issues List.

It was discussed that the minutes from the Committee meetings have not been forwarded to Staff. **Ms. Rauluk indicated that she would have the minutes forwarded to Staff.**

The DG Advocates indicated that the Discussion Document should be set aside because changes are currently being made to the language based on consensus from the Committee. Staff indicated that those changes would need to come to the workgroup for discussion before Staff would incorporate modified language into the Discussion Document.

The next workshop will be held on **Friday, November 18, 2005, from 9:30 a.m. to 4:00 p.m. in the 1st Floor Hearing Room at 1200 W. Washington Street, Phoenix, AZ 85007**. A workshop agenda will be forwarded to the group prior to the workshop date.

Attendees at the Distributed Generation Workshop October 21, 2005	
<u>Name</u>	<u>Representing</u>
Erinn Andreasen	Commission Staff
Bob Baltes	Distributed Energy Association of Arizona
Steve Bischoff	Arizona Public Service
Jana Brandt	Salt River Project
Richard Brill	Deluge, Inc.
Brian Cole	Arizona Public Service
Chris Cook	ASPV/IREC/Sun Edison
David Couture	Tucson Electric Power
Michael Curtis	Mohave & Navopache Electric Cooperatives
Philip Dion	Aide to Commissioner Marc Spitzer
Douglas Fant	Distributed Energy Association of Arizona
Pauline Foley	Pinnacle West
Art Fregoso	Tucson Electric Power
Bryan Gernet	Arizona Public Service
Bill Henry	Tucson Electric Power
Barbara Keene	Commission Staff
Joe McGuirk	Sun Miner
Bill Murphy	Distributed Energy Association of Arizona
Brian O'Donnell	Southwest Gas
Ron Onate	Arizona Public Service
Valerie Rauluk	Greater Tucson Coalition for Solar Energy
Aaron Stallings	Mohave Electric Cooperative
Chris Weathers	Arizona Public Service
Ray Williamson	Commission Staff
Daniel Wilson	Sulphur Springs Valley Electric Cooperative
Tom Yost	Arizona Public Service

Issues List as of October 21, 2005				
Issue	Status	Section	Issue to be Addressed by Working Committee and the DG Working Group	Hot Topic
1	Open	1.1 Applicable Facilities	The issue of interconnecting to a network was identified as a hot topic.	Yes
2		1.2 Categories of Generators	Language clarifying that interconnection for facilities of 10 MW or greater would be processed under FERC guidelines. Language may be suggested by Utilities and DG Advocates.	No
3	Open		Generator categories or levels. What should they be?	No
4	Open	1.3 Screens	Pre-Interconnection Studies and/or Screens. Are they adequate as written?	Yes
5	Open	Section 1.4 Distributed Generation Types	An overview and definition from IEEE 1547 could be used to describe synchronous, induction, separate, and parallel system. What language should be included?	No
6	Open	Section 2.1 Applicant Rights and Responsibilities	Entire section. References to the customer covering interconnection study costs should be moved to a section that provides a breakdown by generator category or level.	Yes
7	Open	Section 2.2 Utility Rights and Responsibilities	It was discussed that sections a, b, and c. in regard to utility responsibilities service set too low of a standard.	Yes
8	Open		Second sentence of the third paragraph that requires utilities to notify the customer should be discussed.	Yes
9	Open		The issue of utilities having the responsibility to maintain their systems and provide information including information on loads to the applicant.	Yes
10	Open		Last sentence of the third paragraph that states that the utility must assess and identify the benefits of DG if studies are needed should be discussed.	Yes
11	Open	Section 2.3 Easements/Rights of Way	This information should be listed by category of generator or levels.	No
12	Open	Section 2.4 Insurance	Entire section	Yes
13	Open	Section 2.5 Non-Circumvention	Entire section	Yes
14	Open	Section 2.7 Indemnity	Entire section	Yes
15	Open	Section 2.8 Other	Entire section	Yes

		No Additional Requirements		
16	Open	Section 3 Definitions	The following terms should be added to the document and are to be determined: “Distribution,” “Transmission,” “Interconnection Facility,” and “Radial”.	No
17	Completed		<p>The following existing definitions are to be determined: “Annualized Period” and “Net Metering.”</p> <p>It was discussed that the definition for “Small Power Production Facility” be obtained from FERC rules.</p> <p>The multiple definitions related to the network system, for instance, “Spot Network;” and “Secondary Spot Network System” should be combined and are to be determined.</p>	No
18	Open		Definitions for “Certified Equipment” and “Network Service” are hot topics and need to be determined.	Yes
19	Completed	Section 4.2 General Process & Procedures	It was discussed that a queuing system should be identified by level of generator.	No
20	Open	Section 4.3 Documentation Requirements	<p>In response to electrical diagram requirements, it was discussed that standard engineering symbols should be adopted and that IEEE could provide a source for reference. In addition, these requirements need to be listed by generator category or level. Which symbols?</p> <p>This topic would be addressed in a manual and not the standard.</p>	No
21	Open	Section 4.4 Equipment Certification (Option 1, DG Advocate Language)	Subsection d. which refers to the addition of protection equipment at the utilities expense should be discussed.	Yes
22	Open	Section 3.9 Disconnect from or reconnect with the Grid Procedure	Visible disconnect required or not. (Also relates to Section 2.8 No Additional Requirements.)	Yes
23	Open	Section 3.10 Interconnection Dispute Resolution	Dispute resolution generally.	No